

# The Piltdown Skull (Letter)

The Morning Post, Jan. 1914  
by W. J. Lewis Abbott

To the Editor of the Morning Post,

Sir, So long as writers will keep making unwarranted oracular pronouncements more or less contradicting themselves and each other, and using ambiguous terms, or terms which have different meanings to different people, so long will the invaluable discoveries at Fletching remain "Piltdown Puzzles" not only to the general reader, but to many beside. Some of these, in a recent issue of the Morning Post are examples, the examination of which might perhaps help your readers. Professor Dawkins claims that Eoanthropus is the most primitive and most simian creature yet recovered, a missing link between man and the anthropoid apes: statements with which no one would quarrel, although the professor himself recently claimed in a contemporary [note] that the skull was the same general primitive type as the other Pleistocene skulls found in river deposits and in caves on the Continent!

It is when we come to the age of the deposit that oracular pronouncements take the place of evidence, with all the attendant serious consequences. At one time it is asserted that Eoanthropus is not of Pliocene age but of Pleistocene, and belongs to a time when the 80-foot terrace was being layed down. At another that it belongs to an early phase of the Pleistocene period, to which all the earliest traces of man belong that have hitherto been found in Europe. In his recent Huxley lecture Professor Dawkins defined "early Pleistocene" as consisting of the Forest Bed series of Norfolk and Suffolk, therefore claiming that all the earliest traces of man belong to this period, is making them all of (Pliocene) Forest Bed age.

But before we can do anything we must first of all decide what we mean by Pliocene, and where we draw the line between Pliocene and Pleistocene. The Geological Survey draw it at the top of the Forest Bed Series, and extensive important discoveries, and the re-examining of old material in the light of recent knowledge, which have been made of recent years (about which the Professor knows nothing whatever) fully confirm the accuracy of this line. The Forest Bed Series, then, really is of Pliocene age.

This period, as far as we know, marks the hey-day in the specific evolution of the deer, i.e., the period in which the greatest number of species, and (with the exception of the great Irish megaceros) the greatest diversity and exuberance of antlers. In addition to the large number of species which have been described, there are several more, not found in the succeeding Pleistocene Beds. But among the former is a species so near red deer as to have been unquestionably assigned to it (by Dr. Smith Woodward among others). The occurrence, then, of red deer in no way proves the Pleistocene age of the Piltdown deposit, seeing that it is common to both Pliocene and Pleistocene.

If by any means one should make the unjustifiable claim of the Pleistocene age of the Forest Bed, then I submit we have no freshwater or land deposits of Pliocene age to

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which we could possibly expect to find anything like a complete series of the Pliocene animals; the few supplied by the marine and fluviomarine beds cannot possibly be all that existed; and in the absence of the material for comparison it is impossible to say whether red deer was here in times anterior to the Forest Bed. In the latter conditions everyone that is au fait with what has been done the last ten years with Pliocene deposits, would admit that red deer is out of court; in the former it would admit being of Pleistocene age.

But before we leave red deer it is just as well to see what is said about this animal in Messrs. Woodward and Dawson's original paper. Of the position in the section in which these were found the Doctor says never a word; but Mr. Dawson states they were found on the adjacent field and on one of the spoil heaps. When I was at Piltdown with them they pointed out the places where they were found, which pointed to them belonging to the top part of the bed, and might therefore not have been of the same age as the lower part in which *Eoanthropus* was found.

Further, the Doctor points out a number of features in which this fragment differs from a corresponding portion of a typical Pleistocene red deer antler; that had we had more of the specimen we might have found it necessary to have made it either a new Pliocene variety of red deer, or even a new species! Lastly, we might point out that there is always a first time when a species is found in a newer or older deposit; the age of the Ightham fissures which produced more species than all other Pleistocene deposits put together had done was challenged on the ground that certain species were found here for the first time! Since then many of them have been found in deposits admittedly of the age claimed for the Ightham fissures, and now no one doubts their age.

Now let us examine that sweeping sentence: "All the mammalia assigned by Dr. Smith Woodward to the Piltdown gravel period belong to living forms." I respectfully submit that from such an expression as this the ordinary reader would naturally think that there were quite a number of these animals; indeed, a very intelligent Cambridge Tripos man said to me: "I see that according to Boyd Dawkins, in to-day's Morning Post, the whole of the mammalia are of living forms." But having disposed of red deer what is left to represent this "whole"? A single molar of a horse which the Doctor declares cannot be specifically determined.

Since the publication of the first paper there has been another year of the most successful working over known, the results of which were brought before the Geological Society on the 17th of December, as reported in these columns. But although the work has been so assiduous as to produce results for which one could scarcely ever dared to have hoped, nothing whatever has been discovered to favour the Pleistocene age of *Eoanthropus*, but everything to favour its Pliocene age!

I deeply regret that it would be attempting too great a claim on your valuable space to go into a descriptive detail of the very numerous facts which go to show the Pliocene age of the Piltdown gravels; sufficient to say they fit in sequential order in a history of the

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Weald from secondary to recent times, upon which I have been engaged for twenty-three years. It is not generally known that we have in the area extensive evidence of the earliest Pliocene marine beds (not represented in East Anglia) of the rise of the land, and the formation of a series of Pliocene gravels to which the bottom parts of the Pliocene Piltdown gravel belongs. The position and physical features surrounding this gravel are such as to make it quite possible for the top to have been disturbed by the Pleistocene Ouse; but not for it to have been laid down by it. But the assigning of this gravel and Eoanthropus to Pleistocene times involves serious considerations which do not appear to have commended themselves to Professor Dawkins and his following.

The Professor has long been opposed to anything other than Pleistocene man on evolutionary grounds, maintaining that had man been here in Pliocene times he would have been the only animal that would have remained unchanged, while those by which he was surrounded have changed. Now, however, he turns the tables upon himself, and makes a generic precursor of man-not homo himself-appear in (the 80ft level) Pleistocene times, surrounded by "all living forms." Here, then, it is the hominidae that have done all the change-not varietal-not specific-but generic, while "all living forms" have remained unaltered! I submit that no one who has seriously studied the evolution of the mammalia would for a single moment admit such an idea.

If it is the Professor's idea that Eoanthropus appeared at this stage it would be interesting to know where homo sapiens (modern man) appeared. It is absolutely certain that it must have taken an immense time-time that would have brought him to quite the low terraces, in which to effect this change! An idea which is against every particle of evidence of every sort, kind, and character we possess. We will return to this point again.

Now as to the evidence of the shaped flint, no greater calamity could possibly have befallen Piltdown man than for these not to have been put into the hands of the very highest specialists at once. Time was when we thought that after examining a few thousands of these things one was able to pronounce a correct opinion upon them. We do not think so now; we know that it is a separate, extensive, and embracing branch of science, requiring very special training; we know that it is necessary to understand the very way in which the elements and molecules came together to form the flint (or other material) to be able to follow all the molecular and somatic changes the stones undergo, which cause them to assume this, that, or the other form under conditions and vicissitudes in the life of a flint. If we do not understand these it is impossible to pass to the next part of the subject, the physics of flint fracture, so as to be able to say what form will result from a flint being struck in this, that, or the other way, or which fact upon the flint has been formed by man and which by Nature.

The Professor says the Palaeolithic implements are identical to those of the older Pleistocene gravels of the Thames Valley (not that the 80ft. level is the oldest). I am prepared to challenge this Professor to bring forward a sample drawer of Thames gravel implements identical with those found at Piltdown. I think I may lay claim to have made as close a study of flint and flint implements and have worked as hard on classification of

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types as many people, and have collected with my own hands hundreds of thousands of specimens, and I challenge the Professor to enumerate six, nay, one single, characteristic of these flints which fixes their age as Chellean. Of all the mystifying libels that have been circulated in connection with Piltdown man, and the one that is calculated to prevent his true age and nature being understood, it is the one which makes him of Chellean age. We might notice in passing that even Mr. Dawson says the implements might be of Chellean or Pre-Chellean age!

But to return to the first appearance of man, I should like to ask the Professor, if it were ante-homo that made the 80ft. level implements, what sort of creature was it that produced the beautiful specimens of the 100ft. terrace and still greater altitudes of the Thames Valley? As he recedes further back, on the evolutionary hypothesis from the Piltdown-Chellean standard he ought to be something less, yet we do not find those beautiful quauqua-symmetrical specimens at Piltdown that we do in the Thames. We need not go up a step at a time and demand what kind of creature it was that produced the implements of the various stages; we might say at once that we have obtained beautifully symmetrically-formed, deeply iron-stained palaeolithic implements in the Southern Weald at various altitudes up to certainly 400ft. above the nearest stream, and we could quote greater altitudes than this if we wished.

If the changes which have taken place in the transformation of Eoanthropus to Homo were effected while something altogether much less than 80ft. has been excavated, what changes must there have been between Eoanthropus and the implement-making creature so far back as even the 400ft. level?

We thus see that palaeontology, geology, and lithoclasiology demand a Pliocene age for Piltdown man.